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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,545

03/10/2005

Rolf Mueller

F-8596

7168

28107 7590 12/11/2008

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EXAMINER

TRAN LIEN, THUY

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

12/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,545	<b>Applicant(s)</b> MUELLER ET AL.	
	<b>Examiner</b> Lien T. Tran	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3,6,8-13 and 15-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,6,8-13, 15-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

The objection to the new matter being inserted in the specification is hereby withdrawn due the submission of the translation.

Claims 15-16, 3,6,8-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 16, applicant claims a method for manufacturing food which comprises the steps of converting NS starch into a state of largely released crystallization potential, converting a VS1 starch into a solution or melt, manufacturing a molecularly disperse mixture of NS and VS1 and initiating a net work by homo and/or heterocrystallization. However, the specification does not teach how these steps are carried out. For instance, how is NS starch converted to state of largely released crystallization potential or how is a molecularly disperse mixture created. The specification does not teach any processing parameters to carry out these steps. Applicant also claims food product containing the starch network; however, there is no teaching of how this starch network is obtained. Thus, applicant has not disclosed an enabling disclosure.

Claims 15-16, 3,6, 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15: Line 2, the phrase “ a disperse phase” is indefinite because it is not clear what this is referred to and it is a disperse phase of what? Lines 7-8, it is not clear

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what is meant by “ at least once in a state of largely released crystallization potential”.

Line 9, what does “ molecularly disperse manner” mean? The scope of the claim cannot be determined.

In claim 16 Steps c,d have the same problem as line 9 of claim 15. Step e is vague and indefinite because it is not clear what the step encompassed; what is being done and how it is being done. What does applicant mean by homo and/or heterocrystallization. Also, it is unclear what the phrase “ to form a product” mean; what product is forming and is it the food product or some other product. The claim is also indefinite in that it is not commensurate with the preamble which recites a method for manufacturing a food. It is not known how the food is manufactured and how the matrix is related to the making of the food. The claim is also vague and indefinite in that it is not known how the steps recited are carried out.

Claim 3 is vague and indefinite because it is not clear what the disperse phase is.

Claim 8 is vague and indefinite because the claim is contradicting. The claim recites that the network or matrix consists entirely or partially of starch and further contains protein. The term consist means that only starch is present; thus, the claim is contradicting because it contains open and close language in the same claim. It is not clear what applicant is intending to claim.

In claim 9: What does applicant mean by “ in absence of nuclei”? How does such feature related to the food product. Line 3, the phrase “ excess water” is indefinite because it is relative; what would be considered as excess water?

Claim 18 has the same problem as claim 8; additionally, what does applicant mean by interpenetrating networks? Interpenetrating to what or what does interpenetrating encompass?

Claims 19-21 have the same problem as claim 9.

The 112 first and second paragraph rejection is maintained as set forth above. A new issue is raised with respect to the 112 second paragraph rejection of claims 16, 8, 18-21 because of the amendment as set forth above.

Claims 8 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The feature in these claims is not disclosed in the specification. The specification does not disclose the network only contain starch.

In the response filed 8/25/08, applicant traverses the 112 first paragraph rejection. However, in traversing the rejection, applicant does not offer any explanation against the rejection. Applicant refers the examiner to certain pages in the specification; however, such referral is not helpful to the examiner to resolve the issue. A careful reading of the specification was made by the examiner before the rejection was made. If the specification was clear and no question or concern arose, the 112 first paragraph rejection would not have been made.

Applicant makes the same traversal against the 112 second paragraph rejection. The traversal is not persuasive for the same reason set forth for the first paragraph rejection and the rejection is maintained for the same reason stated above.

Claims 15-16, 3, 6,8-13,18-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Zallie et al.

The claims are indefinite and vague for the reason set forth in the 112 rejection. The structure and processing steps as claimed are indefinite; it is not clear what the exact nature of the structure of the food product is and the exact processing steps are. To the best interpretation, the claims are directed to food product comprising a starch matrix of three types of starches. The process is directed to the making of a food product by mixing the three types of starch with flour or starch or grits.

Zallie et al disclose a process of making foods such as pasta, desserts, noodles, batter-fried foods et... The process of making the food comprises the step of adding to the foods a mixture of spray-dried, non-granular starch, spray-dried, uniformly gelatinized starch in the form of granular indented spheres and enzymatically debranched, gelatinized starch comprising at least 40% amylose. The starches are dispersed in liquids slowly, with mixing or other shearing so they are uniformly wetted and do not lump. The starch may be derived from plant source having about 40-100% amylose. The starch is enzymatically treated to cleave the branch points on the amylopectin molecule to yield a mixture of short chain amylose and partially debranched amylopectin. The soluble high amylose starches can be used in foods alone or in combination with starches other than high amylose starches. The foods are subjected

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to cooking. The soluble amylose starch is present in the foods in the range of up to about 95% and the level of starch in the blend is in the range of 10-90%. ( see col. 3 lines 48-60, col. 4 lines 6-40, col. 7 lines 25-57 and claim 1.)

Zallie et al disclose food made of starch, flour because they disclose other starches can be used in addition to the mixture of high amylose starches. Foods such as pasta, noodles, batter-fried food also inherently contain flour. Zallie et al disclose a combination of three starches including branched starch and having the amylose content as claimed. The foods disclosed in Zallie et al are the same foods and containing the same starches as claimed; thus, it is inherent the food will have the same starch matrix and disperse phase as claimed. The starches will have the same crystallization potential as claimed. The food products inherently have the properties as in claims 9-13, 18-50. Zallie et al disclose the method as in claim 16 because the starches are subjected to mixing, shearing and heating and the different starches are mixed as claimed.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zallie et al.

Zallie et al do not disclose the food containing gluten.

It would have been obvious to one skilled in the art to add gluten when desiring to increase the protein content of the product. Such determination would have been obvious to one skilled in the art.

In the response filed 8/25/08, applicant argues the office action has not identified any of the element in claim 1 in Zallie et al. This argument is not persuasive. As stated

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in the rejection, the claims are vague and indefinite as stated in the 112 second paragraph rejection and applicant has not amended or explained how they are not indefinite. The best interpretation of the claims is that the food product comprises a mixture of 3 starches and Zallie et al disclose food products comprising a mixture of three starches. The networkable starch is defined on page 21 as any starch or flour of any origin. Zallie et al disclose spray-dried, non-granular starch and also enzymatically debranched gelatinized starch comprising at least 40% amylose; thus, any of this starch is a networkable starch. It is known in the art that any regular starch contains amylopectin which is the branched component and amylose which is a linear component. Thus, the starches in Zallie et al are both considered branched and linear starch and the amylose content is within the ranged claimed. If a starch has more amylose than amylopectin, then the linear portion is greater. Zallie discloses suitable starches includes corn, potato, waxy maize etc.. Waxy maize is amylopectin starch which has more branched portion. Zallie et al also disclose a spray-dried uniformly gelatinized starch which is equivalent to the claimed second primary starch. The starches are mixed and sheared; thus, they are dispersed. Thus, the elements claimed are disclosed in Zallie et al. Applicant makes the same argument with respect to claim 16. As pointed out, Zallie et al do disclose the components as claimed. Applicant argues there is no explain in Zallie of the conversion of a networkable starch into a state of largely released crystallization potential. Applicant's specification does not teach how this step is done; the only active step taught in the specification is the mixing and

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shearing of the starches. Since Zallie et al disclose the same step, it is inherent the same result is obtained in absence of evidence showing to the contrary.

The new rejections are necessitated by amendment.

Applicant's arguments filed 8/25/08 have been fully considered but they are not persuasive.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 7, 2008

/Lien T Tran/

Primary Examiner, Art Unit 1794